



# Saskatoon Freeway Functional Planning Study

Press Briefing  
October 8, 2019

# Introductions

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Project team:



**SNC • LAVALIN**

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**AECOM**

**PRAxis**

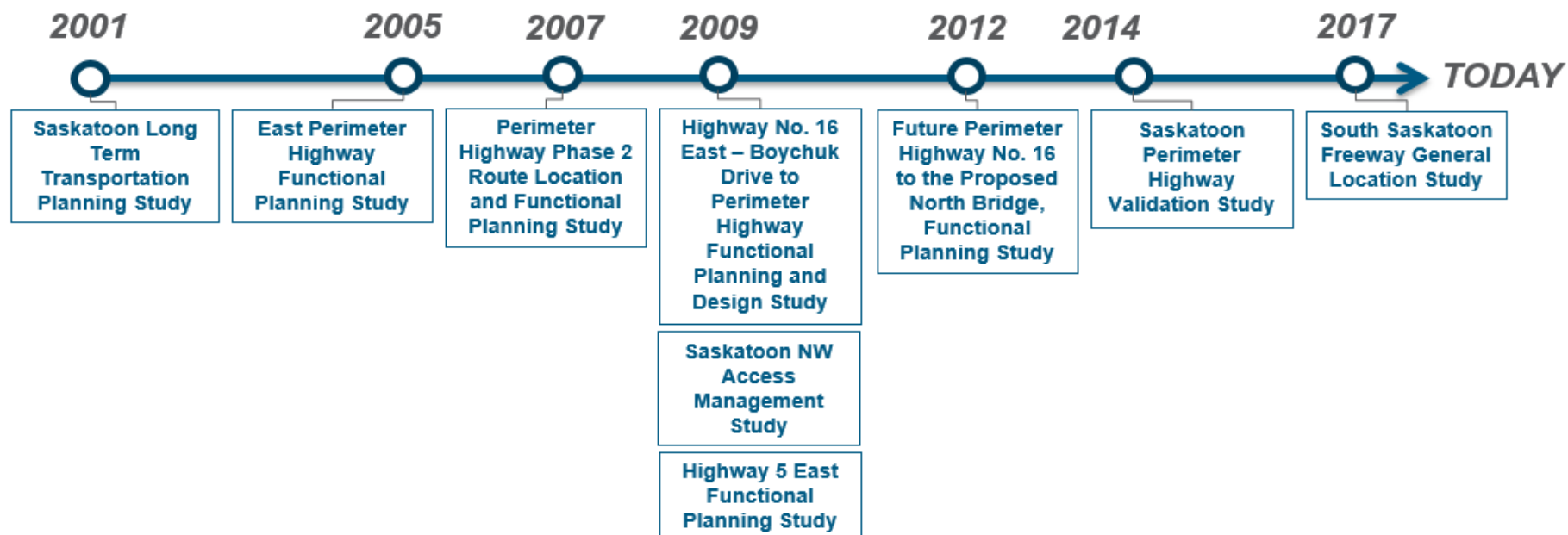
RESEARCH | STRATEGY | RESULTS

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# Agenda

- Introductions
- Project Background
  - Previous Planning Activities
  - Project Overview
- Functional Planning Study
  - What is a Functional Planning Study
  - Functional Planning Study Process
- Project Status Update
  - Technical Working Groups
  - Design Workshop
- Questions

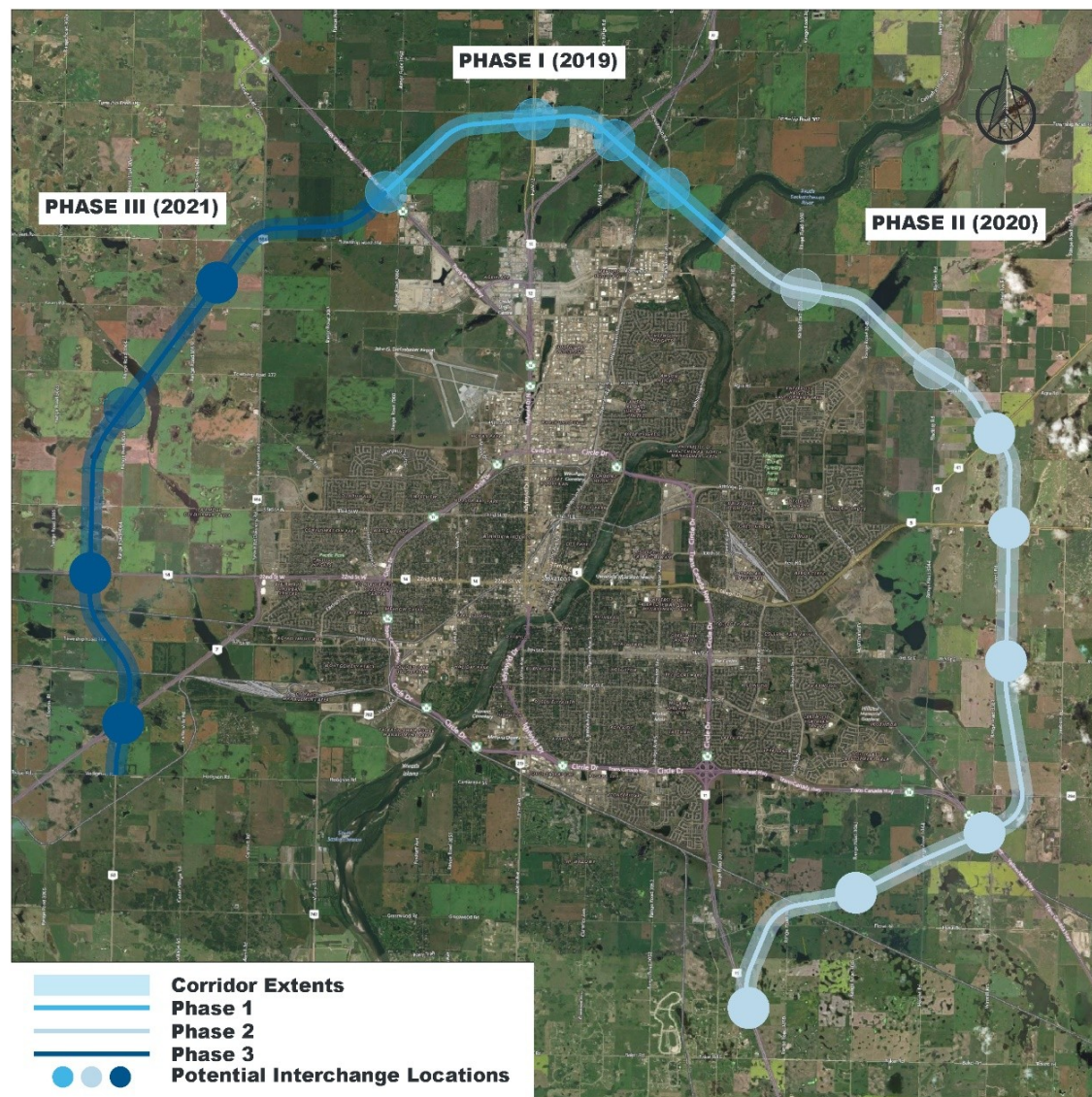
# Previous Planning Studies





# Study Area

- Project Scope:
  - 55 km
  - 16 interchanges
  - 5 railway crossings
  - 2 flyovers
  - 1 Bridge crossing
- Project to be completed in 3 phases:
  - Phase 1 (2019)
  - Phase 2 (2020)
  - Phase 3 (2021)





- **Phase I Scope:**
  - 9.5 km 4-Lane
  - 4-5 Interchanges
  - 1 Railway Crossing
  - 1 flyovers
  - 1 River Bridge Crossing



# What is a Functional Planning Study?...

- A Functional Planning Study establishes the criteria upon which further design is based.
  - Finalize the route within approved corridor;
  - Cost Estimate;
  - Stakeholder Engagement; and
  - Endorsed Functional Plan.
- The study will define the standards, general layout and the staging needed to upgrade the road system for future traffic demands.
- Of key importance is determining how much room is needed for the roadway, who and what will be affected, and how to mitigate impacts.

# Functional Planning Study Process

## Data Collection & Review



- Review of Studies / Background Info
- Site Survey
- Environment & Heritage Review
- Transportation Planning
  - Traffic Models
  - Traffic Operations
  - Traffic Study
- Geometrics
- Railways
- Geotechnical Analysis

## Generation and Evaluation of Options



- Transportation Planning & Geometrics
  - Intersection & Interchange Review
  - Access Management
  - Active Transportation
  - Over-Dimensional Vehicles
- Staged Corridor Review

## Reporting & Deliverables



- Environmental & Heritage
- Stakeholder Engagement
- Transportation Planning & Geometrics
  - Intersections & Interchanges
  - Drainage
- Utilities
- Structural Memo
- Intelligent Transportation Systems
- Road Safety Audit
- Geotechnical
  - Pavements
  - Aggregate Sourcing
- Construction Cost Estimates

**Functional Planning Study Report**

- Complete
- In Progress
- Not Yet Started






# TECHNICAL WORKING GROUPS PROJECT UPDATE

# Stakeholder and Communications

- Members
  - Ministry of Highways
  - City of Saskatoon
  - RM of Corman Park
  - Saskatoon Tribal Council
  - Partnership for Growth (P4G)

# Website



[Home](#) [About the Study](#) [Public Engagement Survey](#) [FAQ](#) [News](#) [Contact](#) 

## SASKATOON FREEWAY PROJECT

# Functional Planning Study

The Government of Saskatchewan, through the Ministry of Highways & Infrastructure, is engaging in a functional planning study which will determine how the Saskatoon Freeway will look and operate. This freeway is expected to be a four-lane, 55-kilometre stretch of divided highway that begins at Highway 11 south of Saskatoon and connects with Highway 7 west of the city. The functional planning study will consider the placement of 16 interchanges, five railway overpasses, two flyovers and one major river crossing. The study is scheduled to be completed in 2021. Currently, there is no timetable for a final decision regarding the freeway's construction.

[About the Study](#)

<https://saskatoonfreeway.org/>

[saskatchewan.ca](https://saskatchewan.ca)

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# Fall Engagement

## 1. Communications

- Fall Newsletter
- Social Media Story Calendar
- Environmental Field Work Story, etc.



Share information

## 2. Landowners

- Face-to-face meetings
- Phase 1 Alignment meetings in Fall



Collect and  
compile input

## 3. Indigenous Partners

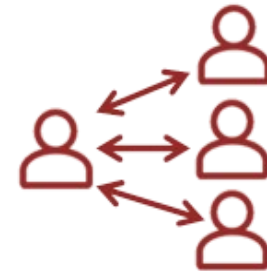
- Saskatoon Tribal Council
- Individual Nation/Chief meetings



# Fall Engagement

## 4. Environmental / Heritage Stakeholders

- Summer Field Survey
- MVA Field research
- NE Swale Watchers – Validation Planning Session in October



Collect and  
compile input

## 5. Industry, Sector, Planning Associations & Stakeholders

- RM of Corman Park Newsletter
- P4G Fall Presentation
- Social Media Story Calendar



Bring people  
together

## 6. The General Public

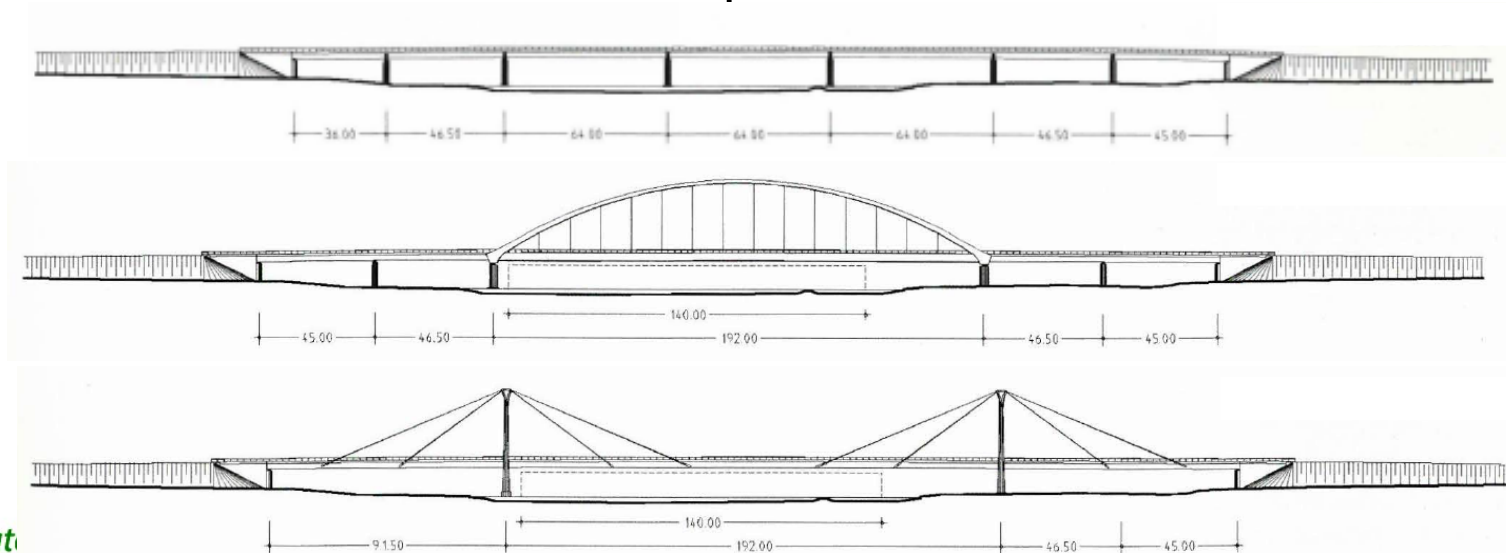
- Website Updates
- Social Media Stories
- Fall Public Forums

# Structural/Geotechnical/Pavements

- Members
  - Ministry of Highways
  - City of Saskatoon
  - RM of Corman Park

# Structural, Geotechnical & Pavements

- Structures:
  - Setting alignment of river bridge.
  - Proceeding with Bridge Option Study.
    - Optimize design to mitigate environmental and heritage risk
    - Study looked at 15 possible bridge options.
    - Narrowed down to 4 options



# Structural, Geotechnical & Pavements

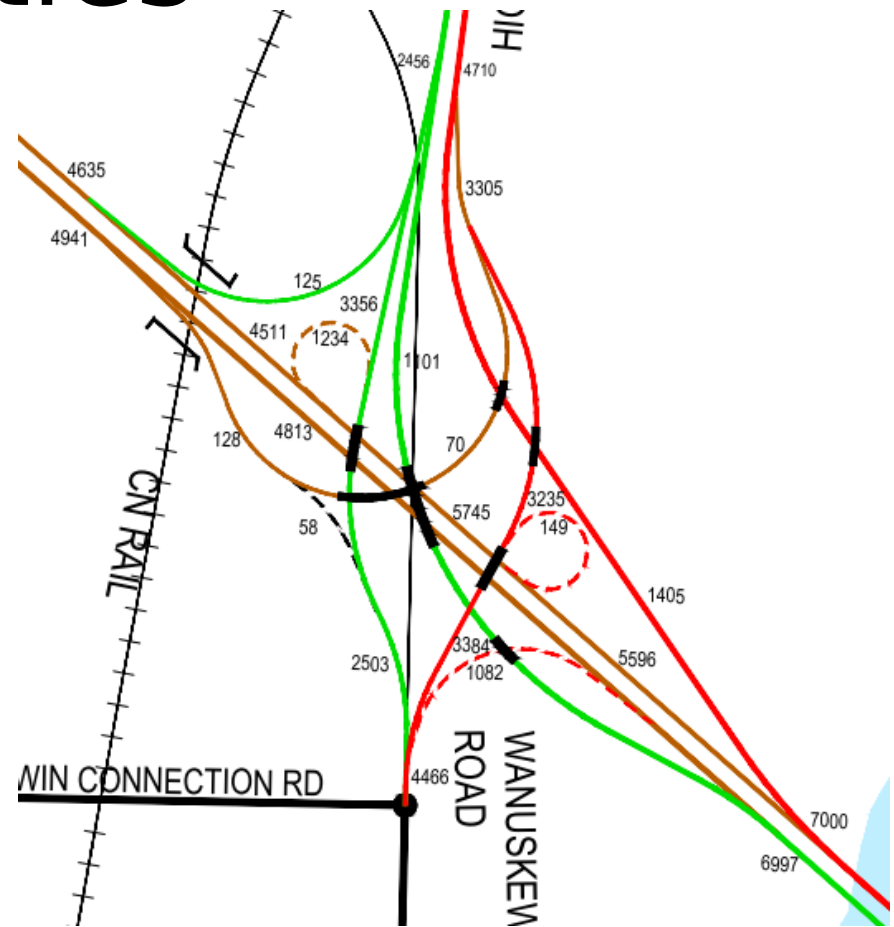
- Geotechnical:
  - Field work to commence in spring 2020.
  - Letters to notify landowners of access have been sent.
  - Aquatic Habitat Protection Permit has been submitted.

# Transportation Planning/Utilities/ITS

- Members
  - Ministry of Highways
  - Ministry of Government Relations
  - City of Saskatoon
  - City of Warman
  - City of Martensville
  - RM of Corman Park
  - Partnership for Growth

# Transportation Planning & Utilities

- Traffic Modelling
  - Completed review of model for performance and forecast assumptions.
  - Conducted model runs to extract freeways interchange demand volumes in Phase I.
  - Ongoing development of traffic operation functional plans for interchange scenarios.



# Geometric and Drainage

- Members
  - Ministry of Highways
  - City of Saskatoon
  - RM of Corman Park
  - Water Security Agency

# Geometric & Drainage

- Finalizing Design Criteria for all phases.
- Design Workshop Scenarios
- Completing Review of Phase I Elements:
  - Alignment Review
  - Interchange Spacing and Challenges
  - Required Traffic Information to Analyze Configuration
  - Service Roads





# Environment/Heritage

- Members
  - Ministry of Highways
  - City of Saskatoon
  - Meewasin Valley Authority
  - Wanuskewin Heritage Park
  - North East Swale Watchers
  - Water Security Agency

# Environmental & Heritage

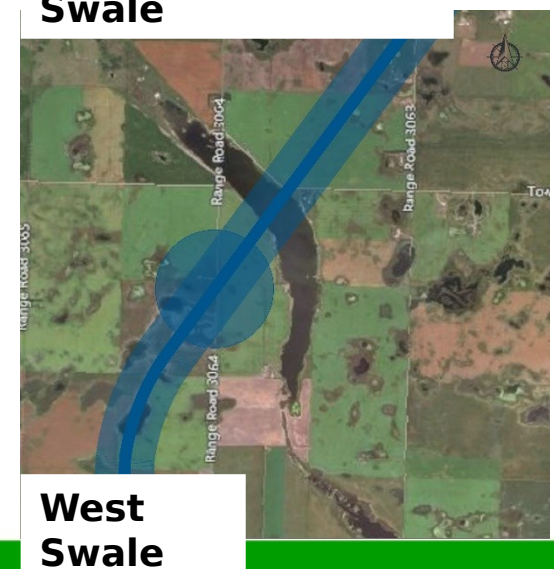
- Desktop review
  - Biophysical & Heritage
    - Public Data Sets
    - Previous Reports

Item	Schedule
Desktop Assessment	Complete
Field Survey	Complete
Reporting	October
Engineering Input	Ongoing

- Field Survey
  - Identification of key movement corridors
  - Identification of critical habitat for rare/sensitive species
  - Supplementing with other agencies information

# Environmental Considerations

- Small Swale/Northeast Swale
  - Unique environment, having ecological, hydrological and hydrogeological characteristics.
  - Swale Watchers have substantial concerns with the Freeway crossing the area.
  - MVA conducted Bio-Blitz in northeast / small swale.
- West Swale
  - Similar habitat to Northeast / Small Swales but more existing disturbance (i.e. cultivated land).
- River Crossing
  - Wanuskewin currently investigating potential for heritage resources on north river bank.
  - Collecting biophysical data in river valley.
- Meewasin Valley Authority (MVA)
  - Meewasin Northeast Swale Master Plan
  - Trail Upgrades
- Wanuskewin
  - UNESCO application.





# DESIGN WORKSHOP



# Design Workshop

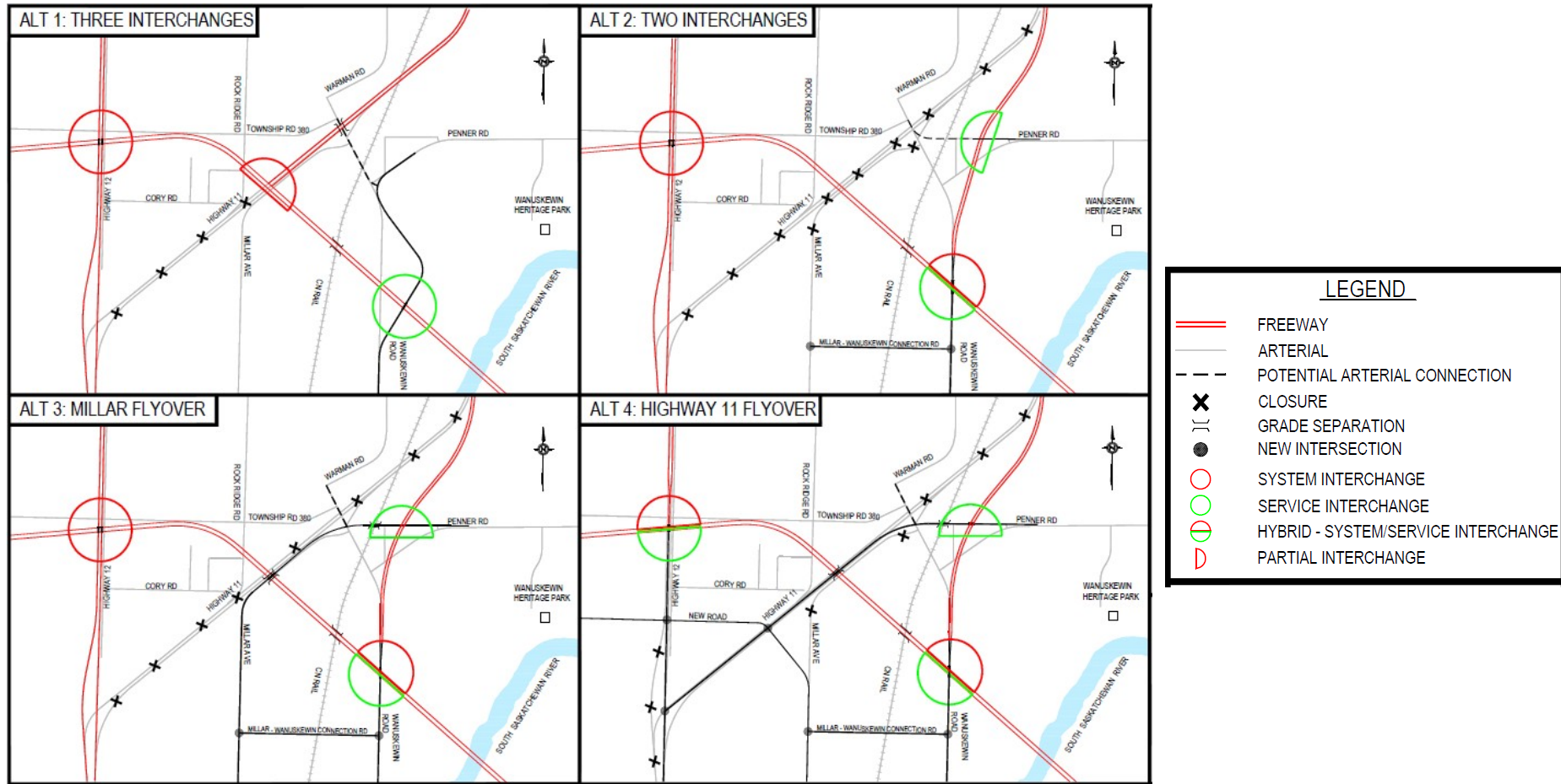
- Number of alternatives available to address the technical challenges:
  - tight interchange spacing;
  - access requirements.
- Need to focus on a preferred scenario, with major stakeholders. Allow further development of options within the preferred scenario.



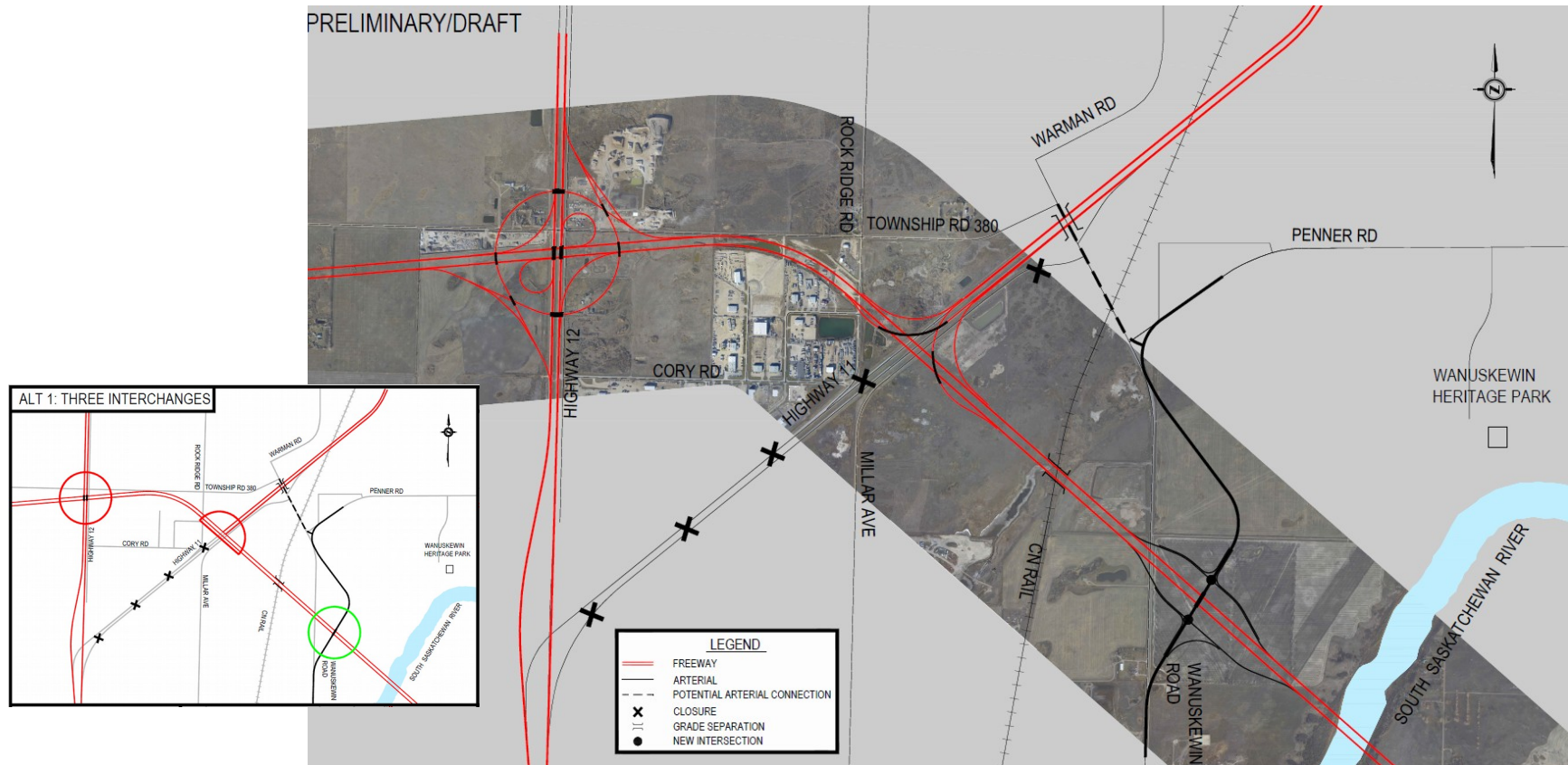
# Design Workshop

- Participants:
  - Attendees:
    - Ministry of Highways
    - City of Saskatoon
    - RM of Corman Park
    - Partnership for Growth
    - Wanuskewin Heritage Park
    - Meewasin Valley Authority
    - North Saskatoon Business Association
  - Others
    - SNC/AECOM

# Design Workshop Scenarios

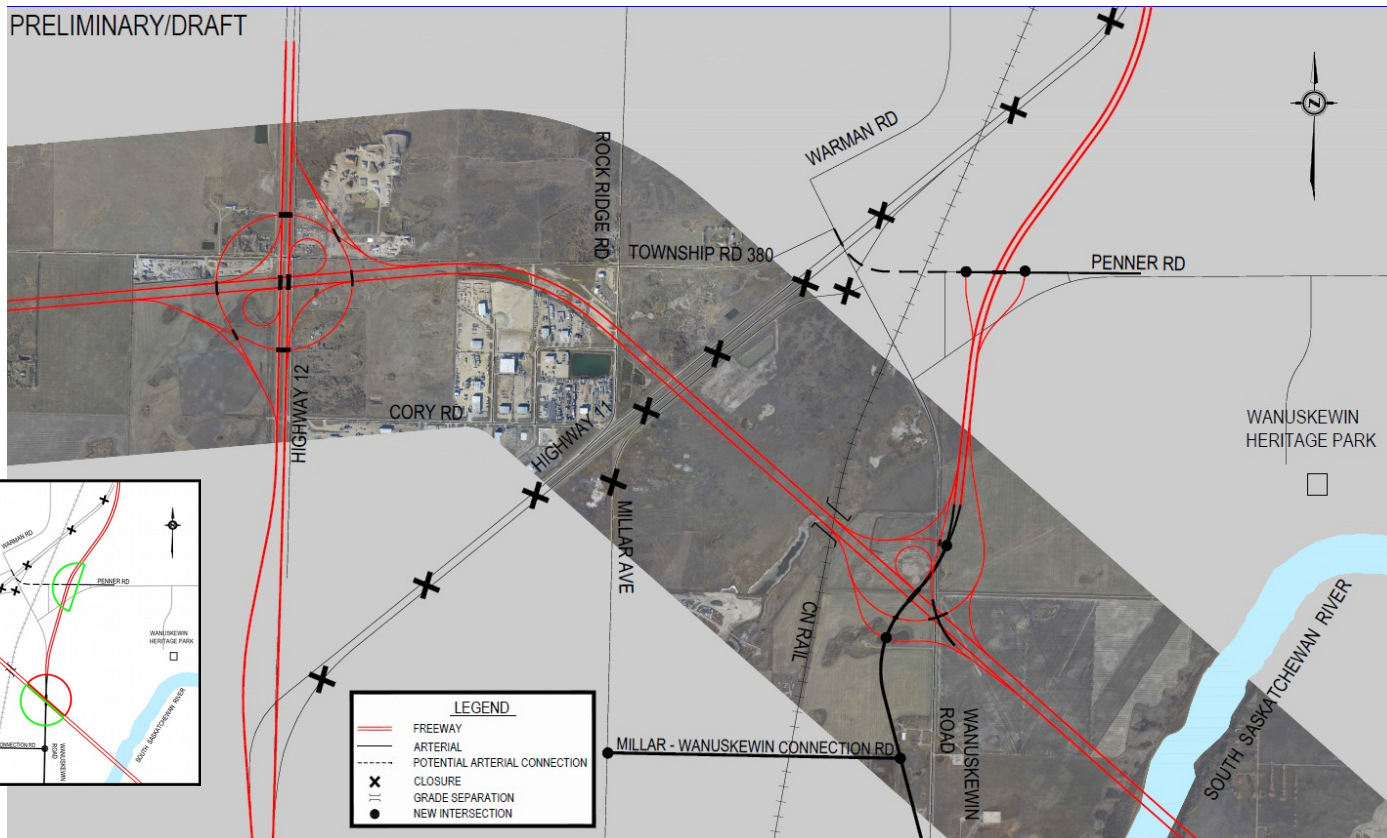


# Alternative 1 - Three Interchanges

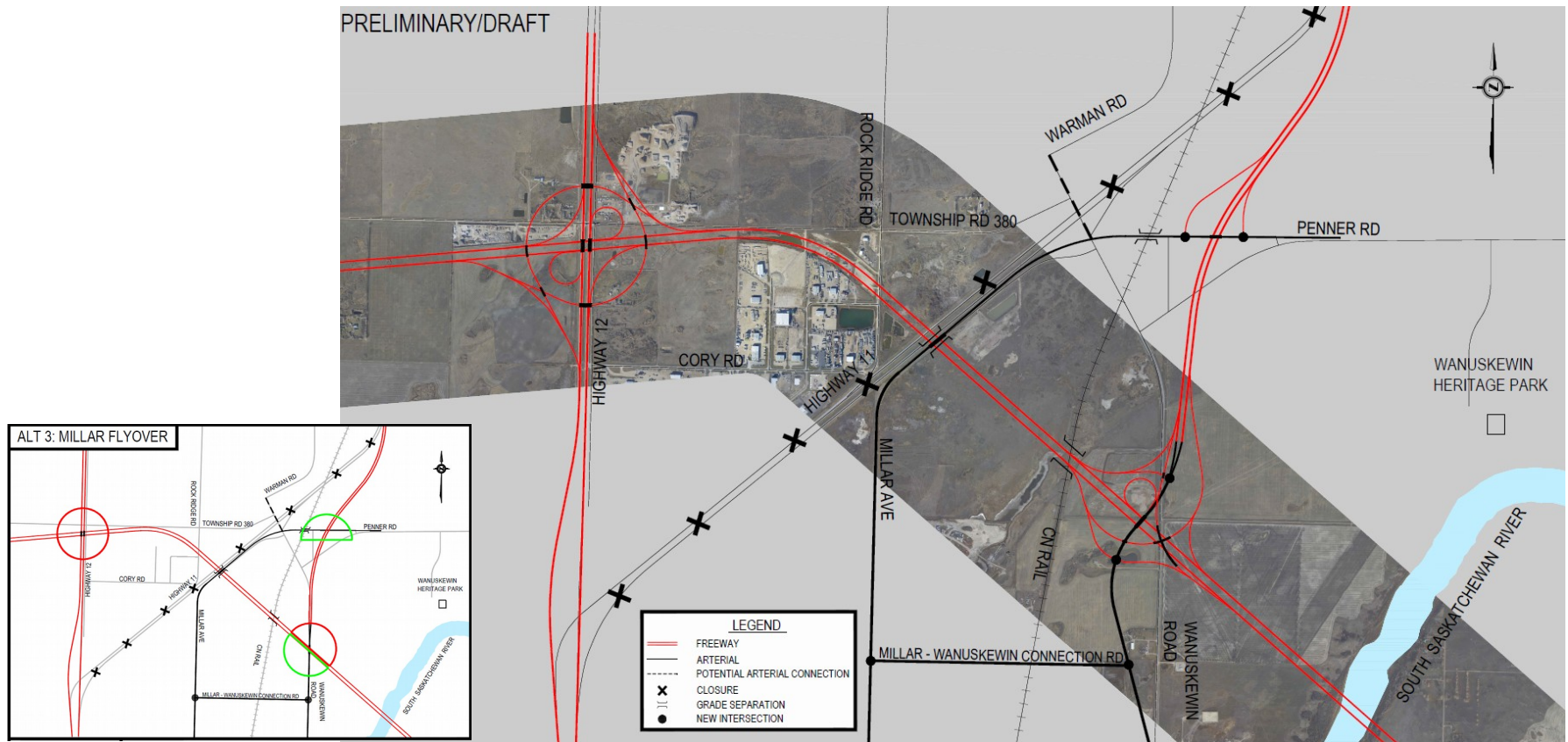




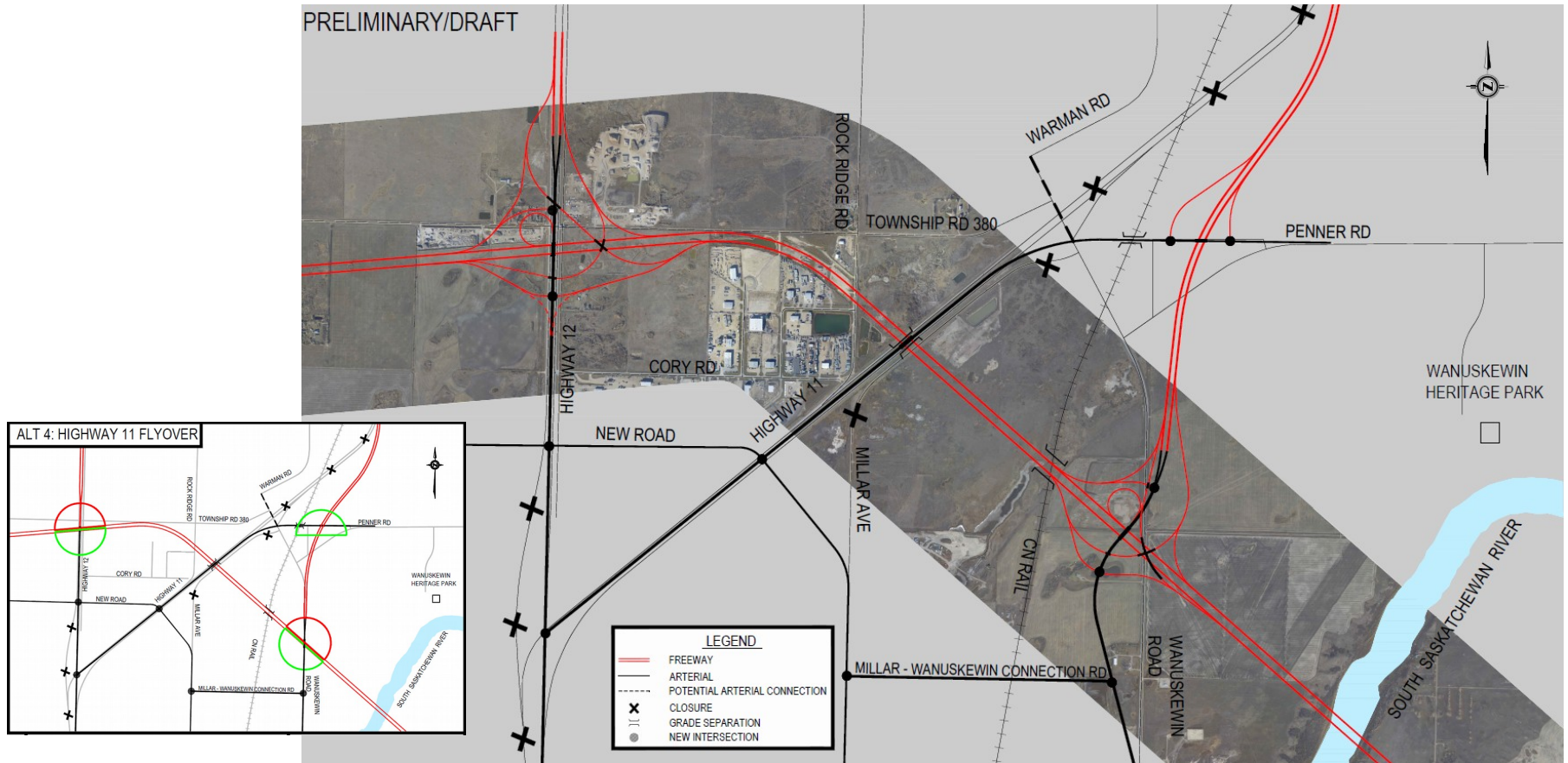
# Alternative 2 - Two Interchanges



# Alternative 3 – Millar Flyover



# Alternative 4 - Highway 11 Flyover





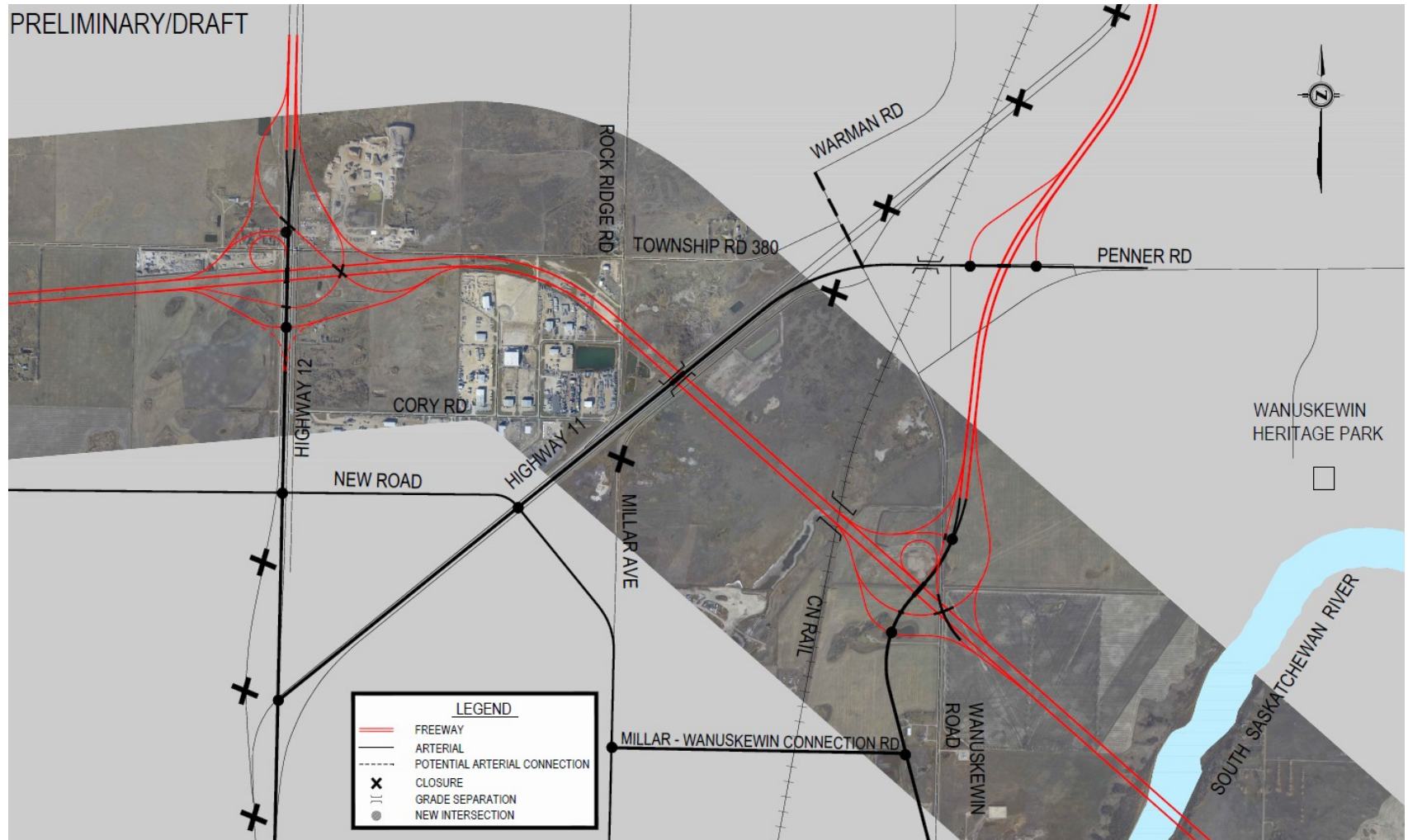
# Performance Criteria

Performance Criteria	Measures
Access Inside Freeway	Access to industrial lands
Access Outside Freeway	Access to industrials, residential and First Nation lands
Access to Wanuskewin Heritage Park	Potential to provide full access from provincial Highway system
Alternate Modes of Transportation	Flexibility to integrate all modes of transportation, including transit and active transportation
Connectivity to Municipal Infrastructure	Aligns with future, planned, and existing infrastructure
Interchange Spacing	Meets interchange spacing requirements
Environmental/Heritage Impact	Noise, view shed and sound scape impacts
Highway to Highway Connectivity	Travel time passing through the city of Saskatoon
Access Across Freeway or Intercity Travel	Travel time and distribution of traffic across multiple points in and out of the city of Saskatoon

# Evaluation

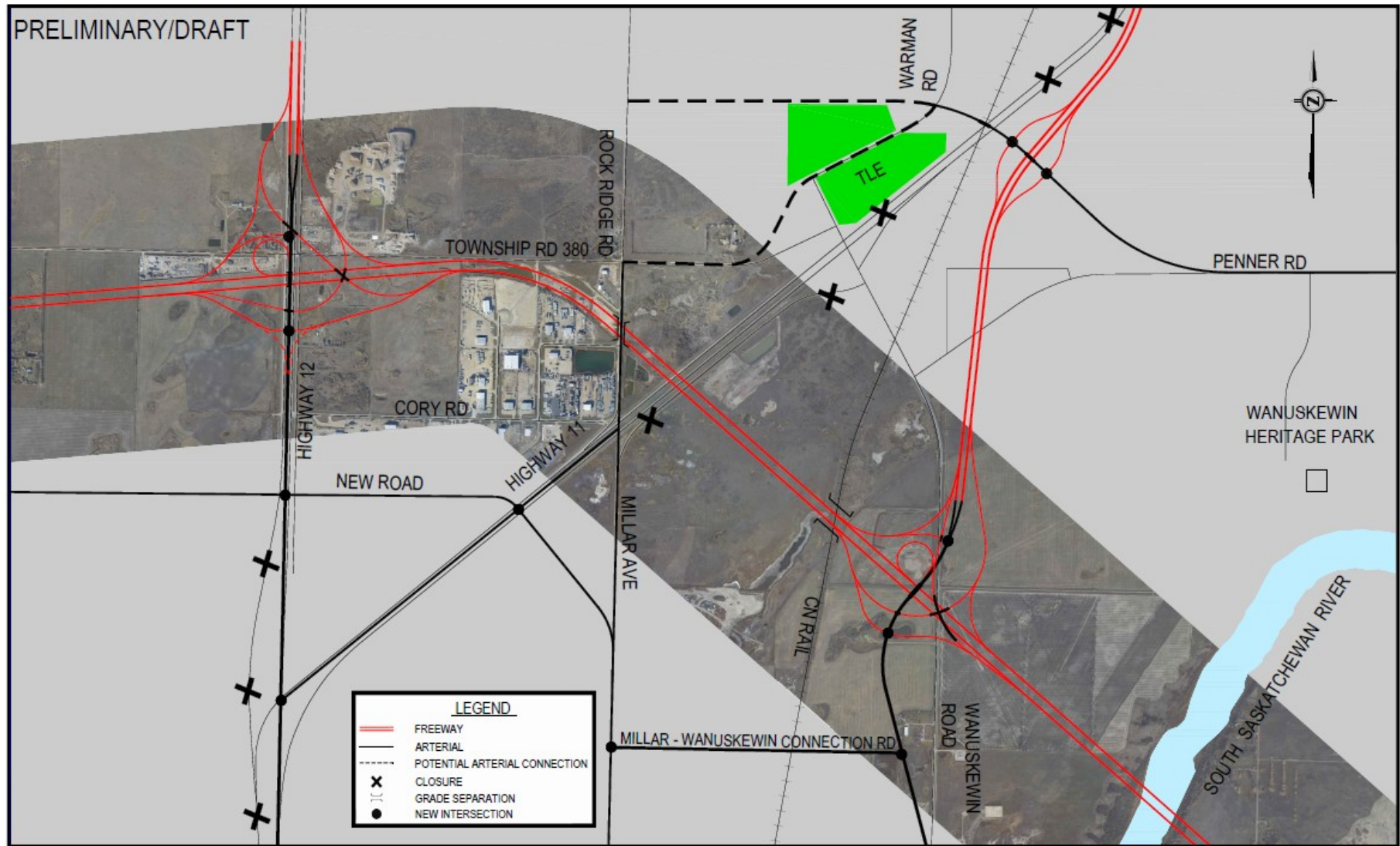
EVALUATION MATRIX												
1. HOW WELL DOES THE SCENARIO SATISFY THE PERFORMANCE CRITERIA (ENTER RATING FROM 1-10, 10=BEST) 2. ENTER ASSIGNED WEIGHT TIMES RATING IN SUB TOTAL 3. SUM ACROSS AND RANK			ccess Inside Freeway	ccess Outside reeway	ccess to Wanuskewin eritage Park	lternative Modes of ransportation	unicipal frastructure	terchange Spacing	nvironmental / eritage Impact	ighway to Highway onnectivity	ccess Across Freeway r Intercity Travel	Total Performance (P)
Alternatives	Weight →		11	10	7	3	10	23	3	20	14	
Alternative 1: Three Interchanges	Rating 1-10		1.00	3.00	5.00	3.00	3.00	1.00	7.00	5.00	1.00	
	Sub Total		11.00	30.00	35.00	9.00	30.00	23.00	21.00	100.00	14.00	273
Alternative 2: Two Interchanges	Rating 1-10		2.00	4.00	9.00	2.00	4.00	7.00	4.00	8.00	5.00	
	Sub Total		22.00	40.00	63.00	6.00	40.00	161.00	12.00	160.00	70.00	574
Alternative 3: Millar Flyover	Rating 1-10		5.00	6.00	9.00	5.00	6.00	8.00	4.00	8.00	6.00	
	Sub Total		55.00	60.00	63.00	15.00	60.00	184.00	12.00	160.00	84.00	693
Alternative 4: Highway 11 Flyover	Rating 1-10		8.00	7.00	9.00	5.00	8.00	8.00	4.00	9.00	8.00	
	Sub Total		88.00	70.00	63.00	15.00	80.00	184.00	12.00	180.00	112.00	804

# Preferred Alternative





# Updated Alternative

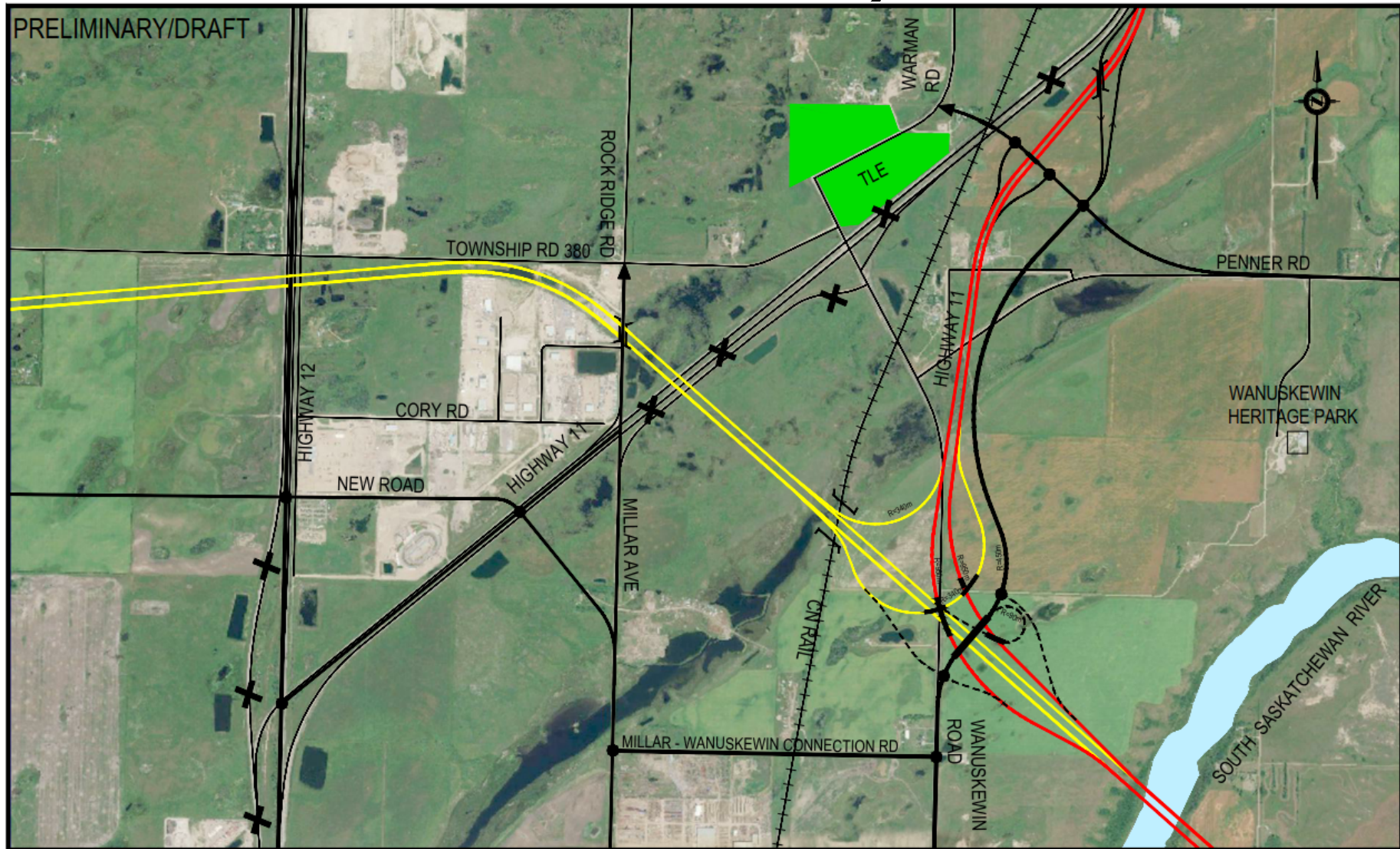


# Additional Configurations



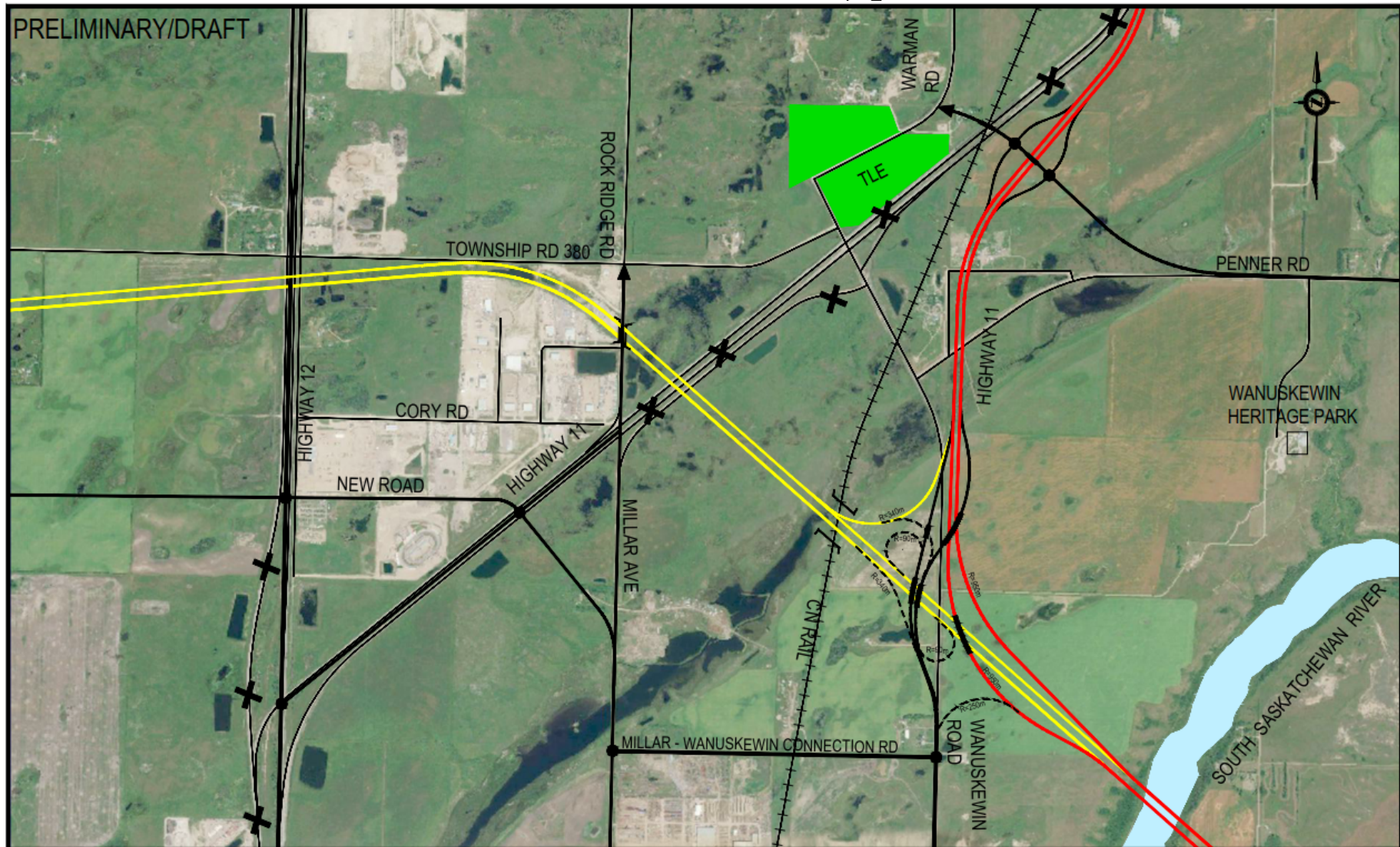


# Additional Configurations



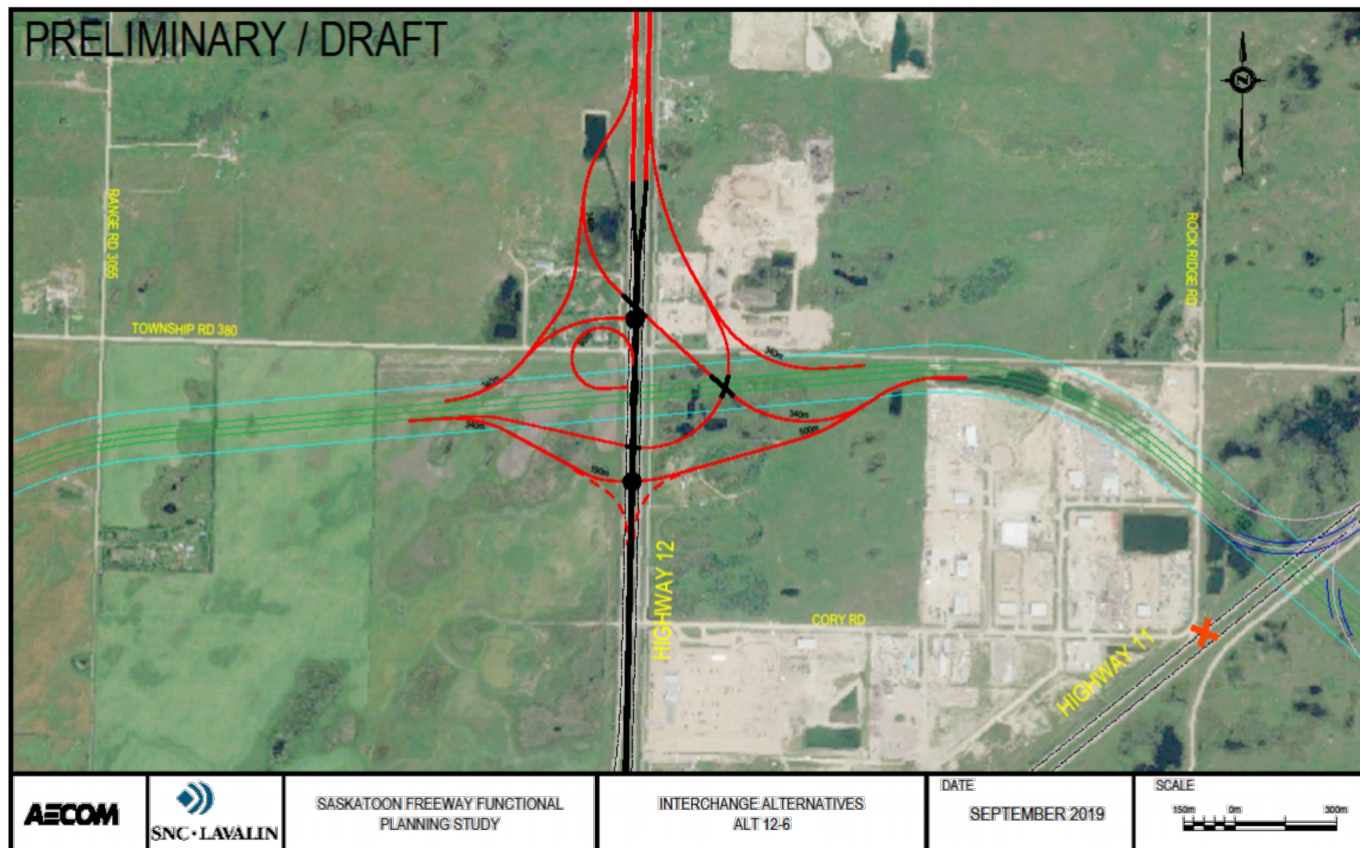


# Additional Configurations



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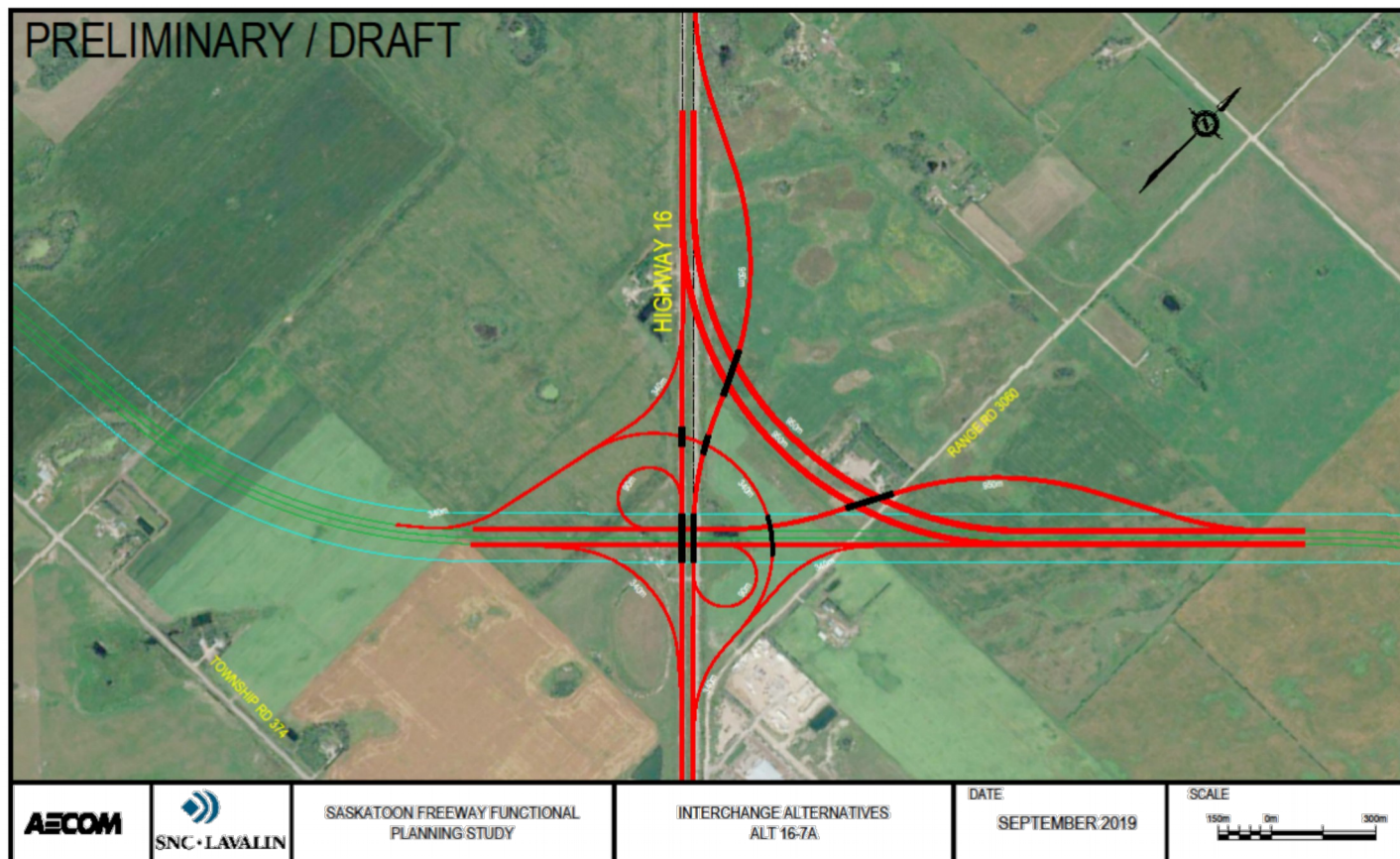
- Hwy 12: Protection for System Interchange





# Additional Configurations

- Hwy 16: Option 1 (Freeway WB exits right)



# Timelines

- Phase 1 – early 2020
- Completion of Functional Plan - 2021
  - Completed ROW requirements
- Land Purchase
  - Allows for advanced purchase if allocated budget
  - Willing seller – willing buyer
- Construction
  - No scheduled construction timelines
  - Potential of 10 – 15 years in future
  - Anticipated need at a city population of 400k, functioning to 750k.



# Look Ahead

- Stakeholder Engagement
  - Present alternatives, evaluation criteria and recommended alternative to stakeholders and public
    - Website
    - One-on-One meeting
    - Community events
- Develop various options for recommended alternative
  - Public Engagement Forums (i.e. Open Houses) after options are developed.
  - Further meetings with stakeholders/landowners.
  - Expect increased involvement from landowners once options are presented, first discussions about amount of actual impact to land.

# Look Ahead

- Transportation Planning & Utilities
  - Transportation Demand Model
  - Continue working with utilities to obtain existing and future plans.
- Environment & Heritage
  - Completion of Field Surveys and Reporting
  - Ongoing Engineering Input
- Geotechnical & Structures
  - Drilling program
  - Bridge Option Study
- Geometric and Drainage
  - Further detailed work on developing options for Phase I around preferred alternative.

# Questions?



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